Claims 1 - 19 are cancelled.

20. (Previously Presented) An optical system comprising:

a first optical element, said first optical element having a focal point,

a further optical element,

compensating elements,

said first optical element is connected to said further optical element by means of a mounting and said compensating elements,

said first optical element and said further optical element defining an axial direction,

said compensating elements being arranged in a region of said first optical element providing thermal conductivity from said first optical element to said compensating elements so that said compensating elements undergo approximately a same temperature change as said first optical element, and

said compensating elements having a length in said axial direction and being made from a material so as to displace said further optical element from said first optical element in a same amount as a displacement of said focal point occurs because of a heating of said first optical element.

21. (Previously Presented) The optical system of claim 20, wherein at least one of said first and further optical element comprises a lens.

22. (Previously Presented) The optical system of claim 20, wherein said mounting comprises a material of a density of at least 2.5×10^3 kg/m^3.

23. (Previously Presented) The optical system of claim 20, wherein said compensating elements have a thermal expansion coefficient deviating from that of the mounting.

24. (Previously Presented) An optical system comprising:

a first optical element,

a further optical element,

compensating elements,

said first optical element being connected to said further optical element by means of a mounting and said compensating elements,

said first optical element and said further optical element defining an axial direction,

said compensating elements being arranged in a region of said first optical element providing thermal conductivity from said first optical element to said compensating elements so that said compensating elements undergo approximately a same temperature change as said first optical element, wherein said compensating elements provide due to a heating of said first optical element a displacement of said second optical element from said first optical element in said axial direction, and

wherein said compensating elements comprise at least partly titanium.

25. (Previously Presented) The optical system of claim 24, wherein at least one of said first and further optical element comprises a lens.

26 (Previously Presented) The optical system of claim 24, wherein said mounting comprises a material of a density of at least 2.5×10^3 kg/m^3.

27 (Previously Presented) The optical system pf claim 24, wherein said compensating elements have a thermal expansion coefficient deviating from that of the mounting.

28 (Withdrawn) An optical system comprising:

a primary mirror,

a secondary mirror,

compensating elements,

said primary mirror being connected to said secondary mirror by means of a mounting and said compensating elements,

wherein said mounting comprises a telescope tube comprising an end facing said primary mirror and an end facing said secondary mirror, and

wherein said compensating elements comprise at least three feet that at one end carry said end of said telescope tube facing said primary mirror, and at another end are connected to said primary mirror.

29. (Withdrawn) The optical system of claim 28, wherein said mounting comprises a material having a density of at most 2.5×10^3 kg/m^3

30. (Withdrawn) The optical system of claim 28, wherein said compensating elements have a thermal expansion coefficient deviating from that of said mounting.

31. (Withdrawn) The optical system of claim 28, wherein said mounting comprises C/C SiC material.

32. (Withdrawn) An optical system comprising:

a primary mirror,

a secondary mirror,

compensating elements,

said primary mirror being connected to said secondary mirror by means of a mounting and said compensating elements,

wherein said mounting comprises a telescope tube comprising an end facing said primary mirror and an end facing said secondary mirror, and

wherein said compensating elements comprise a ring that at one end carries said end of said telescope tube facing said primary mirror, and at another end is connected to said primary mirror.

33. (Withdrawn) The optical system of claim 32, wherein said mounting comprises a material having a density of at most 2.5×10^3 kg/m^3

34 (Withdrawn) The optical system of claim 32, wherein said compensating elements have a thermal expansion coefficient deviating from that of said mounting.

35 (Withdrawn) The optical system of claim 32, wherein said mounting comprises C/C SiC material.

36. (New) An optical system according to claim 20, wherein the mounting (15, 115) comprises C/C SiC material.

37. (New) An optical system according to claim 20, wherein the optical system is a telescope, as is used in orbit.

38. (New) An optical system according to claim 20, wherein the compensating elements are connected on one side with the mounting and on the other side with the mirror mounting.

39. (New) An optical system according to claim 20, wherein the compensating elements are connected on one side with the mounting and on the other side with the mirror member.

40. (New) An optical system according to claim 20, wherein the first optical element has a mirror carrier made of Quartz or SiN.

41. (New) An optical system according to claim 20, wherein in the case that a mirror carrier comprises Quartz the compensating element at least partially comprises titanium.

42. (New) An optical system according to claim 20, wherein in the case that a mirror carrier comprises SiN the compensating element comprises at least partially aluminum or titanium.